DIRECT TESTIMONY

OF

MATTHEW SMITH

PIPELINE SAFETY ANALYST II

SAFETY AND RELIABILITY DIVISION

ILLINOIS COMMERCE COMMISSION

Application pursuant to Section 7-204 of the Public Utilities Act for authority to engage in a Reorganization, to enter into an agreement with affiliated interests pursuant to Section 7-101, and for such other approvals as may be required under the Public Utilities Act to effectuate the Reorganization

Wisconsin Energy Corporation, Integrys Energy Group, Inc.,Peoples Energy, LLC, The Peoples Gas Light & Coke Company,North Shore Gas Company, ATC Management Inc., andAmerican Transmission Company, LLC

DOCKET NO. 14-0496

November 20, 2014

WITNESS IDENTIFICATION

Q. What is your name and business address?

A. My name is Matthew Smith. My business address is 527 E. Capitol Avenue, Springfield, IL.

Q. By whom are you employed and in what capacity?

A. I am employed by the Illinois Commerce Commission ("Commission") as a Pipeline Safety Analyst II in the Pipeline Safety Program ("PSP") in the Safety and Reliability Division. In my current position, I perform audits and inspections for the Commission's PSP, which ensures that natural gas system operators in Illinois are meeting minimum federal safety standards prescribed by 49 Code of Federal Regulations ("CFR") Parts 191, 192, 193, and 199, and by the Illinois Gas Pipeline Safety Act.[1]

Q. Please describe your education and experience?

A. I received a B.A. from the University of Illinois at Springfield in Legal Studies in 2001. Prior to my employment with the Commission, I held the position of Journeyman Welder with Ameren Illinois Company. My duties included construction activities, welding, emergency response, and various other duties. All duties and activities that I conducted were done in a manner consistent with company, state, and federal requirements. Since accepting my position at the Commission, I have received extensive technical training at the Pipeline Hazardous Material Safety Administration ("PHMSA") Training and Qualification Division ("T&Q") in Oklahoma City, Oklahoma,

[1] 220 ILCS 20/1, et seq.

which is where state and federal pipeline safety inspectors receive technical education relating to the enforcement and interpretation of pipeline safety standards. My training at T&Q has included subjects such as: Introduction to Part 192; Pipeline Safety Regulation; Application and Compliance; Natural Gas Odorization; Joining of Pipeline Materials; Incident Investigation; Pipeline Integrity Management; Operator Qualification; Pipeline Corrosion Control; Pressure Regulation and Overpressure Protection; and various other technical aspects of natural gas pipeline operations. I have worked as a Pipeline Safety Analyst for the Commission for over 7 years and have a total of 22 years experience in the natural gas transportation industry.

PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to recommend that the Commission adopt as conditions for approval of the reorganization two pipeline safety initiatives to protect the interests of the Peoples Gas Light and Coke Company ("PGL") and its customers as permitted by Section 7-204(f) of the Public Utilities Act.

Q. Please summarize the two initiatives you recommend be adopted.

A. I recommend that the Commission order Peoples Gas to adopt a Pipeline Safety Management System and to move all of its inside meters to accessible locations outside of customer premises.

Q. What authority or jurisdiction does the ICC have over pipeline safety in this matter?

A. While I am not an attorney, it is my understanding that, through the enactment of the Natural Gas Pipeline Safety Act ("Federal Act"), enacted as Public Law 90-481,

Congress mandated gas pipeline safety regulation by the United States Department of Transportation ("USDOT") in 1968. The Federal Act provided for state pipeline safety regulation in states certified by USDOT. In 1969, the Illinois General Assembly enacted the Illinois Gas Pipeline Safety Act ("Illinois Act"),[2] enacted as Public Act 76-1288. Subsection 3(a) of the Illinois Act[3] charged the Commission with adopting rules that are at least as inclusive and as stringent as the pipeline safety regulations adopted by the United States Secretary of Transportation, and required the Commission to seek federal certification to regulate pipeline safety within Illinois. Section 9 of the Illinois Act[4] required the Commission to prepare and file with the Secretary of Transportation the initial and annual certification and report required by Subsection 5(a) of the Federal Act. Since the 1970s, the Commission has maintained certification under rules codified at 83 Ill. Adm. Code 590.10, et seq. Finally, the federal standards codified under 49 CFR Parts 191, 192, 193, and 199 have been adopted by the Commission pursuant to 83 Ill. Adm. Code 590.10, et seq., as required to maintain the Commission's authority for enforcement of the Minimum Federal Safety Standards granted to the Commission under an agreement pursuant to Section 5 of the Federal Act[5] with the U.S. Department of Transportation Office of Pipeline Safety.

Q. How does the Commission meet the requirements of the certification agreement?

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2 *Id.*

3 220 ILCS 20/3.

4 220 ILCS 20/9.

5 49 U.S.C.A. § 60105 (West 2012).

A. The PSP, within the Safety and Reliability Division, under the Public Utilities Bureau, conducts periodic audits and inspections of intrastate natural gas system operators within Illinois. The audits and inspections are conducted to determine operator compliance with the minimum safety standards adopted 83 Ill. Adm. Code Part 590. When the Pipeline Safety inspection findings establish that an operator is in apparent non-compliance with one or more of the standards, a Notice of Probable Violation ("NOPV") is issued to the operator. To resolve an NOPV, the operator is required to explain the action it will initiate to correct the violation as well as actions it intends to take to prevent a recurrence of a similar violation of the specific code section. If the operator does not acknowledge the alleged violation, refuses to take the corrective actions, or the actions taken by the operator are not adequate to correct the NOPV, Staff recommends that citation order proceedings be initiated to resolve the issue and in some cases, civil penalties are assessed.

Q. Please briefly discuss the pipeline safety issues related to your recommendation.

A. The first issue is the repeated pipeline safety failures attributable to PGL that have been the subject of previous citation cases and/or NOPVs issued to PGL over the last several years. The second issue concerns the vast number of inside meters within the PGL distribution system. Inside meters are located inside customer premises and sometimes difficult for PGL to access without customer cooperation. The rules require PGL to inspect these meters, as with all other meters on PGL's distribution system. PGL has had continued difficulties for many years accessing these inside meters.

Q. Regarding PGL's previous failures highlighted in citation cases, please summarize the citation cases you will discuss

A. I will discuss three major cases (Docket Nos. 06-0311, 12-0624, and 10-0716) involving various PGL pipeline safety failures which resulted in citation orders.

Q. Please describe the circumstances surrounding the first citation case, Docket 06-0311.

A. In 2004, Pipeline Safety Staff audited PGL's cathodic protection records. Cathodic protection is required by 49 CFR 192 Subpart I. In PGL's case, cathodic protection is applied to a pipeline by inducing an electrical current. The current protects the steel pipeline and by allowing a sacrificial piece of material to corrode rather than the steel pipeline itself. Without cathodic protection, the pipeline would lose metal, which would lead to leaks. The audit indicated that PGL was in apparent non-compliance with 49 CFR §192.465. An NOPV was issued on January 30, 2004, noting that several isolated sections were not inspected. "Isolated" refers to a portion of a steel pipeline that is not connected in an electrically conductive manner to another section of steel or various other material type of pipelines, such as cast or ductile iron. The steel is isolated via insulated couplings that prevent the steel pipe from becoming anodic[6] to the adjoining pipeline material. The isolated segments require localized cathodic polarization[7] and testing. The isolated main sections and isolated service lines were not tested within the ten year interval required. PGL responded to the NOPV with a plan to correct the non-compliance.

On March 8-9, 2005, over a year after the NOPV was issued, a follow-up audit of PGL was performed. That record audit indicated PGL continued to be in apparent non-compliance with 49 CFR §192.465 and numerous deficiencies were noted during that audit. On April 21, 2005, Staff issued an additional NOPV, noting that 49 CFR §192.465 (d) requires each operator to take prompt remedial action to correct any deficiencies indicated by cathodic monitoring.

PGL responded in a letter, dated May 16, 2005, stating that it had recently revised its Corrosion Control Policy to state that its "objective is to complete necessary remedial action such that cathodic protection is restored to the system within one year from the time of discovery of the inadequate protection level." PGL confirmed that in calendar years 2003 and 2004 combined, over 3,000 test points had not been monitored as required. The citation case that eventually resulted from the two NOPVs, Docket No. 06-0311, was resolved by a settlement between PGL and Commission Staff that the Commission accepted and included in its Order on December 20, 2006.

The settlement terms in the case included an acknowledgement by PGL that it was not in compliance with applicable federal and state pipeline safety regulations 49 CFR §192.13 (c) and 49 CFR §192.465 (a) and (d). The settlement terms required PGL to pay a penalty of $1,000,000.00 and to agree to pay for and cooperate with a consultant retained by the Commission. The consultant was to conduct a comprehensive investigation of PGL's compliance with the Commission's pipeline safety regulations, including, but not limited to, evaluation of record-keeping procedures, substantiation of pipeline safety inspection records, and verification of

recorded pipeline safety conditions, followed by an audit of PGL's continuing actions to implement recommended improvements to its pipeline safety program. Finally, PGL agreed that it would bring the utility into compliance with the Commission's pipeline safety regulations, including conforming to prudent utility practices as generally understood in the industry and/or such practices as determined by Staff in conjunction with PGL.

Q. What conclusions do you draw from this case?

A. PGL used field employees that were not adequately trained to conduct the field testing. That practice, in conjunction with inadequate supervision, led to the failure to implement proper corrective actions to establish adequate levels of cathodic protection.

Q. Please describe the matter addressed in Docket No. 12-0624.

A. The case involved an explosion at 6652 S. Keating Avenue. The investigation determined that PGL failed to follow its own procedures when it installed a natural gas service line through a customer's sewer piping. The resident then damaged the service line using an electric powered auger in an attempt to clear the blockage in the sewer line. Once the service line was damaged, the released gas entered the residence, resulting in an explosion, two injuries and damage to other nearby structures.

The finding of a subsequent investigation by PSP Staff was that PGL failed to follow its own directional drilling procedure to install a service line. This failure was in direct violation of 49 CFR §192.13 (c). The settlement terms of Docket No. 12-0624 in the Commission's Order required PGL to pay a penalty of $100,000.00.

Q. What conclusions do you draw from this case?

A. PGL failed to follow its own procedures as required by 49 CFR §192.13 (c). In addition, a lack of field supervision and the lack of a quality assurance program contributed to PGL's failure to follow procedures.

Q. Please describe the circumstances in Docket No. 10-0716.

A. On March 3, 2010, PGL reported an incident at 358 West Jackson Blvd. The incident involved a PGL crew pressure testing a segment of pipeline to establish a higher operating pressure for the pipeline. During the pressure testing activities, a segment of the pipeline dislodged and struck one employee and then damaged the shoring in the excavation. Two employees were injured, one fatally.

The investigation determined that PGL failed to follow its own procedure "Peoples Main Work 7.100" entitled "Procedure for Uprating Steel Mains from Low Pressure to Medium Pressure." The finding of the Commission Order was that PGL failed to meet the requirements of 49 CFR §192.13 (c) and 49 CFR §192.515 (a).

The Commission's Order in the case accepted settlement terms which included a $200,000.00 penalty, revision of certain main work procedures that address blocking and bracing requirements, with the intention of consolidating several procedures into a single procedure and clarifying requirements for blocking and bracing. Further training was required on an annual basis for blocking and bracing requirements.

Q. What conclusions do you draw from this case?

A. PGL's procedures were modified to eliminate various existing procedural interpretations of what was required when blocking and bracing a pipeline. The lack

of clearly understood procedures and a lack of supervision to ensure employees' clear understanding of the applicable procedures both contributed to the incident.

Q. Please describe the circumstances surrounding the probable violations that have been discovered at PGL that did not result in citation cases.

A. I researched all NOPVs issued to PGL from January 1, 2011 through November 19, 2014. I identified 27 total violations, including discovering an additional 21 instances of violations related to the NOPVs. When referring to an NOPV, an "instance" is when an operator, in this case PGL, failed to meet the requirements of a specific Section of 49 CFR 192 and it was determined that PGL failed to meet this requirement on more than one occasion. For example, if PGL failed to pressure test a service line according to 49 CFR §192.725, then that single failure could result in an NOPV. But, if PGL failed to properly test numerous service lines, then each failure becomes an "instance" for purposes of 49 CFR §192.725.

My review indicated that PGL had received numerous NOPVs for corrosion control procedures, leak survey procedures, improperly abandoning facilities, inadequate record keeping, failure to follow procedures for numerous requirements, pressure testing, emergency procedures, customer notification, qualifying employees to fabricate pipe joints, public awareness, reporting safety-related conditions, hazardous leak repairs, resolving unsafe conditions, operator qualifications and plastic pipe overexposure to ultraviolet light.

Q. What conclusions did you draw from your review?

A. The violations show a pattern over several years of PGL's failure to fully follow its own procedures and to comply with the various requirements of 49 CFR 191 and

192. In fact, one NOPV I reviewed was directly related to the settlement terms of Docket No. 06-0311. I recently issued a NOPV to PGL for failure to review a contractor's Operator Qualification ("OQ") plan to determine if the plan was as stringent as PGL's. The Commission's Order in Docket No. 06-0311 included 66 recommendations for PGL, and among them Recommendation V-4 specifically required PGL to review contractor OQ plans to determine if the plan met or exceeded PGL's own OQ plan requirements.

Q. Will you summarize your opinion regarding the various citation cases and numerous NOPVs?

A. The items previously mentioned indicate a pattern of failure at PGL to properly identify 49 CFR 191 and 192 requirements, to adequately follow procedures, providing inadequate supervision and providing inadequate quality assurance. These failures are highlighted by the fact that PGL has had continual issues communicating areas of concern within its own organization. This point was again recently highlighted by the NOPV the PSP issued to PGL for failure to review a contractor's OQ program. The requirement to review the OQ program was a specific recommendation by Liberty Consulting adopted by the Commission as part of the settlement agreement in Docket No. 06-0311.

Q. Please discuss the inside meter issue.

A. I reviewed past citation documents and discovered that PGL was informed in 2000 that all inside gas meter sets must be inspected for leakage according to 49 CFR §192.723 and inspected for atmospheric corrosion according to 49 CFR §192.481. That leakage inspection is required at locations outside of a business district once

every five calendar years not to exceed 63 months. The requirement for conducting an atmospheric corrosion inspection is once every three calendar years not to exceed 39 months.

Staff was informed by PGL that compliance with this requirement was finally met by the end of June 2014. An audit of the records to determine compliance has yet to be conducted by Staff.

Q. What has occurred since PGL was notified in 2000 of its failure to inspect the inside meter sets?

A. According to a Staff Report written by Rex Evans, PSP Manager, filed on May 20, 2005; on January 10, 2000, Staff sent a letter to PGL informing it of an apparent violation of 49 CFR §192.723. On September 14, 2001, Staff presented to the Commissioners and Executive Director a memo outlining Staff's course of action with PGL in order to resolve the problem. PGL had committed to inspecting all inside meter locations by mid-2005.

Eventually, PGL's failures to bring its inside safety inspections, for both leakage and corrosion, up to requirements, led to a citation case, Docket No. 05-0341. On March 22, 2006, the Commission entered a final order in that case. In that Order, the Commission found that in 2000, 2001, 2002, 2003 and 2004 PGL was unable to comply with the Inside Safety Inspection program ("ISI") that includes inspecting all company owned inside piping, that is, inside customer premises, up to and including the outlet of the gas meter for both leakage and atmospheric corrosion. The Order further stated that, as an example of PGL's ISI failures in 2004, five years after PGL

was notified of the violation, PGL failed to perform 87,762 inspections, or approximately 30% of the total ISIs needed for compliance.

On December 19, 2007, the Commission entered an Interim Order in Docket No. 07-0358. That citation case involved the overall difficulty PGL has had and continues to have regarding its ability to gain access to inside gas meters for proper inspection. Due to that difficulty, PGL provided a plan to complete ISI inspections going forward and for authorization to petition USDOT for two waivers that would extend the time frame for inspecting the inside piping for atmospheric corrosion. The Commission's Order in Docket No. 07-0358 was held pending the outcome of the waiver process.

On March 25, 2009, the Commission entered a final order in Docket No. 08-0028, approving the waivers requested and received by PGL from PHMSA that extended the amount of time PGL may take to conduct an atmospheric corrosion inspection, and shortened the time PGL may take to conduct a leakage survey, of inside piping. The two waivers bring into line both the atmospheric corrosion inspection and leakage survey to allow for either to be completed in three calendar years not to exceed 51 months.

On March 15, 2011, Darin Burk, the Commission's PSP Manager, issued a NOPV to PGL for failure to adequately comply with 49 CFR §§192.723 and 192.481 (a). The NOPV was issued following receipt of an anonymous letter detailing the process used by PGL to conduct inside leak inspections and a subsequent PSP Staff inquiry into the issue. PGL's NOPV response indicated that, once a single inside meter was inspected, then its procedure was to consider that the remaining

meters located throughout the building need not be inspected. PGL's NOPV response also requested 3 years to come into compliance with additional inspections. An extension to the end of June 2014 was agreed to by Mr. Burk.

Staff held several meetings with PGL regarding compliance with the ISI program during 2014. PGL was concerned that compliance might not be met due to the large volume and types of customers requiring an ISI. Most meters were in locations where multiple meters existed and obtaining access to all meters was difficult. PGL eventually notified Staff that it had come into compliance by the date required, June 30, 2014, but, as indicated, Staff has yet to conduct an audit of the ISI records to determine if the statements by PGL are correct.

Q. How long has it taken PGL to become fully compliant with 49 CFR §§192.723 and 192.481, in regards to ISI's?

A. In 2000, PGL was notified that it was not in compliance; PGL claims it has become fully compliant as of the end of June 2014.

Q. What has caused PGL to fail to comply with this requirement for 14 years?

A. There are several issues, but the main issue has been PGL's difficulty in gaining access to locations where the inside meters are located. Single family residences present their own difficulties due to some customers permitting anyone in their residence, for a variety of possible reasons, but access to these locations is not the most significant issue. The largest problem appears when multiple meters and customers are located within one building. These meters may be in different locations, as, for example, in an apartment building where separate meters for each apartment are located in those apartments. To complete the inspection, each meter

in each apartment has to be inspected. Therefore, all tenants in the single building must individually provide access for PGL inspections for that single location to be considered completely inspected. The more meters in a building, the greater the difficulty of achieving complete compliance becomes.

RECOMMENDATIONS

Q. Due to the areas of concern that you have discussed, what recommendations do you have in this matter with regard to pipeline safety?

A. There two items that need to be addressed. One relates to the ISI program and the second is regarding the various citation cases and NOPVs.

Q. Please provide your recommendations regarding the ISI program.

A. The ISI program at PGL has taken 14 years to become fully compliant. PGL has improved upon its ability to conduct the ISI audits, but this is also the first time all inspections have been completed. Difficulties during future inspections may cause PGL to again become non-compliant. To alleviate the access issues with the ISI program, I recommend that as a condition for approval of the reorganization in order to protect the interest of PGL and its customers, the Commission order PGL to implement a program to move all inside customer meters to accessible outside locations within 10 years from the effective date of the merger.

Q. Please provide your recommendation for the various citation cases and NOPVs?

A. Due to the various issues PGL has encountered regarding its repeated failures to maintain various aspects of pipeline safety compliance, I recommend as another condition for approval of the proposed reorganization in order to protect the interests

of PGL and its customers that the Commission in its final order direct PGL to implement a Pipeline Safety Management System ("PSMS") in accordance with American Petroleum Institute API RP 1173.

Q. What is API RP 1173?

A. This Recommended Practice ("RP") provides guidance to pipeline operators for developing and maintaining a PSMS. The elements of this RP are structured to minimize nonconformity with other pipeline safety processes and procedures. While this RP may include some elements of other management systems (such as those particular to environmental management, occupational health, personnel safety management, financial management, or insurance risk management), it does not include all requirements specific to those systems. This RP may be used either in conjunction with or independent of other industry-specified documents. Finally, this RP builds upon and augments existing requirements and is not intended to duplicate requirements of any other consensus standards or regulations.

Managing the safety of a complex process requires a system of efforts to address multiple, dynamic activities and circumstances. Pursuing the industry-wide goal of zero incidents requires comprehensive, systemic effort. Some efforts within a safety management system are directed to a specific need or activity. For example, non-punitive reporting of near misses is one element that can be used to identify potential risks and initiate proactive measures. Though many process incidents are relatively infrequent, they can still lead to serious consequences. As discussed earlier in my testimony, the breakdown in supervision and confusion regarding the appropriate pipe blocking and bracing procedure resulted in the fatal

injury to an employee. Therefore, other elements of a safety management system address the need to continuously operate safely and improve safety performance. Effective communication between various departments to identify potential and interactive threats can produce effective risk reduction. These indirect broader efforts include:

a. demonstrating management commitment,

b. structuring pipeline safety risk-management decisions,

c. increasing confidence in risk prevention and mitigation,

d. providing a platform for sharing knowledge and lessons learned, and

e. promoting a safety-oriented culture.

Building on these efforts yields the following principles on which to base a safety management system:

a. Commitment, leadership, and oversight from top management are vital to the overall success of a PSMS.

b. A safety-oriented culture is essential to enable the effective implementation and continuous improvement of safety management system processes and procedures.

c. Risk management is an integral part of the design, construction, maintenance, and operation of a pipeline.

d. Pipelines are designed, constructed, operated, and maintained in a manner that complies with Federal, state, and local regulations, and conform to applicable industry codes and consensus standards with the goal of reducing risk, preventing releases, and minimizing the occurrence of abnormal operations.

e. Defined operational controls are essential to the safe operation and maintenance of pipelines.

f. Incident response improves the likelihood of protection of life and property and minimizes adverse environmental consequences.

g. The creation of a learning environment for continuous improvement is achieved by investigating incidents thoroughly, fostering non-punitive reporting systems, and communicating lessons learned.

h. Periodic assessment of risk management effectiveness and pipeline safety performance improvement, as well as audits, is essential to ensure effective PSMS performance.

i. Pipeline operating personnel throughout the organization must effectively communicate and collaborate with one another. Further, communicating with service providers to share information that supports decision making and completing planned tasks (processes and procedures) is essential.

Q. Why is a Pipeline Safety Management System important for PGL to implement?

A. I have personally audited PGL for over seven years and have observed issues within the organization where communication has become and remains an issue. The PSMS would improve PGL's internal lines of communication and would require all facets of the organization to better understand their roles and what is required of them. This program would therefore improve pipeline safety.

Q. Is the current version of API RP 1173 the final version?

A. No, at this time API RP 1173 is in draft form, and the final version should be released in the Spring of 2015.

SUMMARY

Q. Would you summarize your testimony?

A. PGL has received numerous violations and citation orders from the PSP and Commission. These deficiencies have highlighted a culture at PGL that requires a major change in the Company's overall institutional mindset. Staff is proposing, as a condition for approval of the reorganization, a Pipeline Safety Management System, in line with API RP 1173, be established and implemented to improve PGL's ability to recognize and react to the requirements of 49 CFR 192 and move beyond minimum efforts to simply achieve compliance toward a true safety culture. Beginning in 2000, PGL was informed of the requirement to inspect all gas piping inside of a building that is jurisdictional up to and including the outlet of the gas meter. This requirement is to be completed once every 3 years not to exceed 51 months. PGL complied with this requirement in 2014, although an audit of the records to determine compliance has not been conducted by PSP. The failure to inspect the jurisdictional piping and the various difficulties with gaining access to conduct the inspections require actions to be taken that will allow PGL to easily inspect these pipeline segments. Therefore as another condition for approval of the reorganization which is necessary to protect the interests of PGL and its customers, PGL must be ordered by the Commission to move all inside jurisdictional gas facilities to outside within 10 years from the effective date of the merger.

Q. Does this conclude your testimony?

406 A. Yes, it does.